



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera

Hartman Windows and Doors, LLC.

531 Southern Boulevard

West Palm Beach, FL 33405

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "European Mahogany Clipped/Uncropped" Wood and Steel Mullion – L.M.I

APPROVAL DOCUMENT: Drawing No. M07-01, titled "Clipped/Uncropped Wood & Steel Mullion", sheets 1 through 7 of 7, dated 05/08/07, with revision C dated 02/20/12, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P. E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large Missile and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises and renews NOA# 09-0610.09 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



MP
7/5/12

NOA No. 12-0402.10
Expiration Date: December 27, 2017
Approval Date: July 12, 2012
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **M07-01**, titled "Clipped/Unclipped" Wood & Steel Mullion", sheets 1 through 7 of 7, dated 05/08/07, with revision C dated 02/20/12, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94
along with marked-up drawings and installation diagram of outswing entrance doors with sidelites, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-5191**, dated 02/19/07, signed and sealed by Michael Wenzel, P.E.
(Submitted under previous NOA# 07-0918.02)
2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94
along with marked-up drawings and installation diagram of outswing doors with sidelites and transom, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-4941**, dated 12/11/06, signed and sealed by Michael Wenzel, P.E.
(Submitted under previous NOA# 07-0918.02)

C. CALCULATIONS


1. Anchor verification calculations and structural analysis, complying with FBC-2010, prepared by Al-Farooq Corporation, dated 02/13/12, signed and sealed by Javad Ahmad, P.E.
2. Glazing complies with ASTM E1300-04

D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

E. MATERIAL CERTIFICATIONS

1. None.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 12-0402.10
Expiration Date: December 27, 2017
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Hartman Windows and Doors, LLC

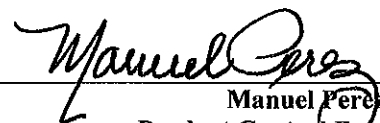
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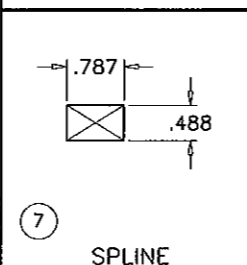
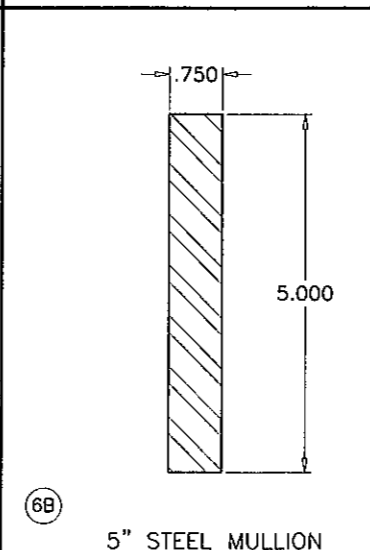
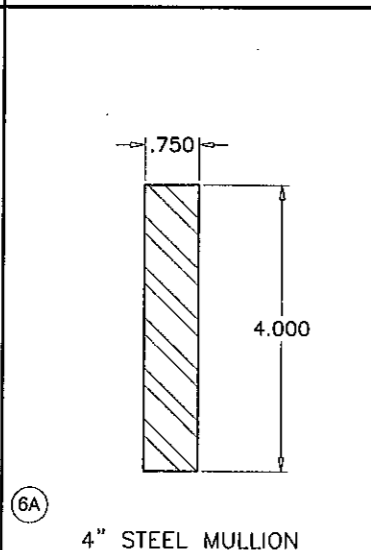
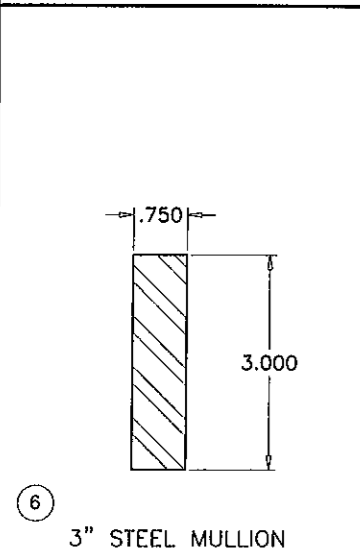
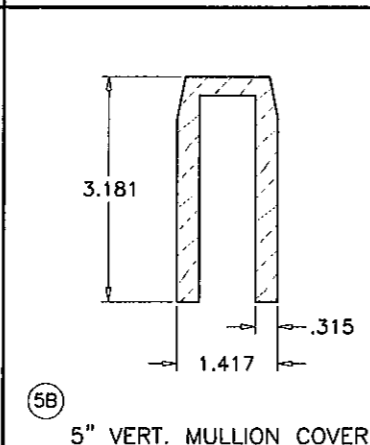
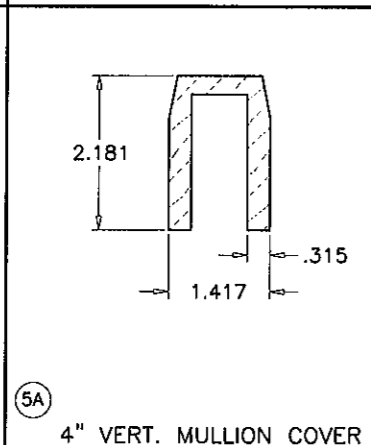
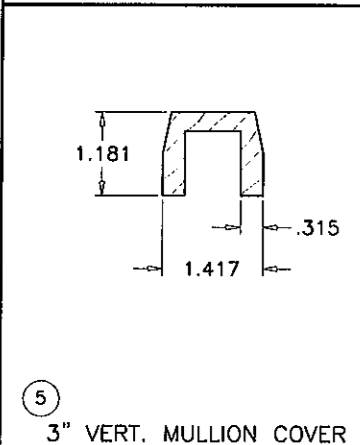
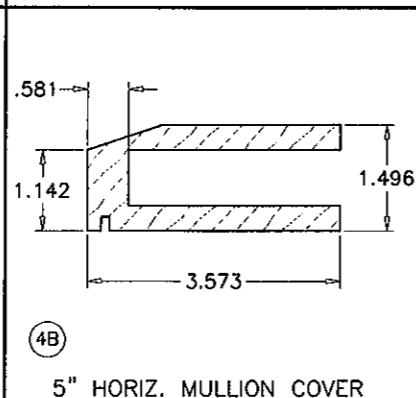
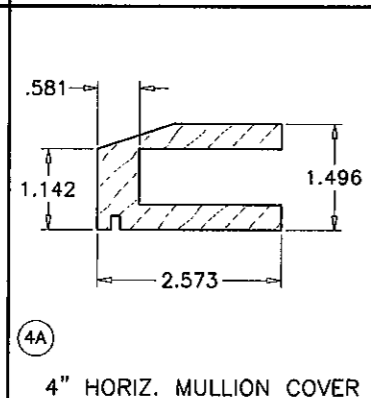
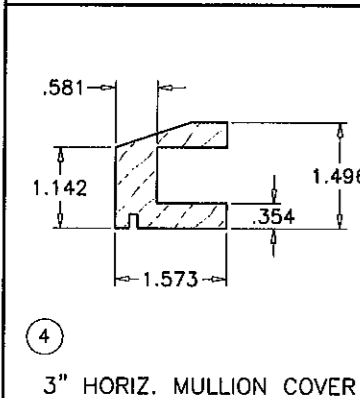
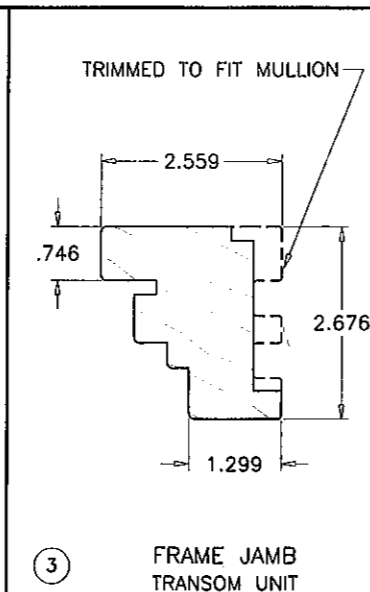
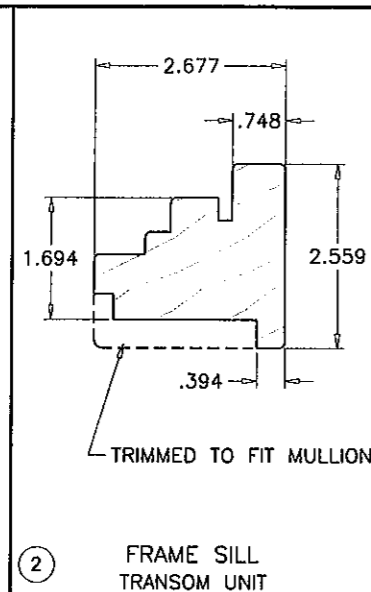
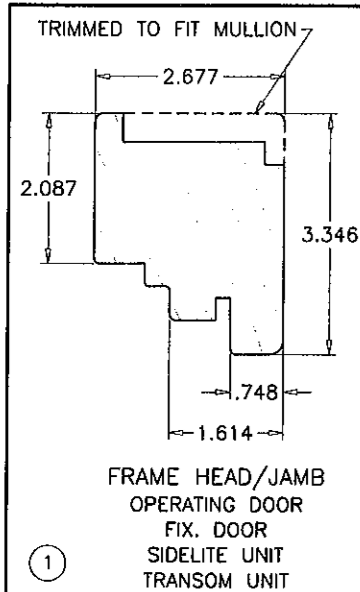
F. STATEMENTS

1. Statement letter of conformance, complying with FBC-2010, and of no financial interest, dated February 13, 2012, signed and sealed by Javad Ahmad, P.E.
2. Laboratory compliance letter for Test Report no. **FTL-5191**, issued by Fenestration Testing Laboratory, Inc., dated 03/21/07, signed and sealed by Michael Wenzel, P. E. *(Submitted under previous NOA# 07-0918.02)*
3. Laboratory compliance letter for Test Report no. **FTL-4941**, issued by Fenestration Testing Laboratory, Inc., dated 02/15/07, signed and sealed by Michael Wenzel, P. E. *(Submitted under previous NOA# 07-0918.02)*

G. OTHER

1. Notice of Acceptance No. **09-0610.09**, issued to Hartman Windows and Doors, LLC for their Series "European Clipped/Unclipped" Wood and Steel Mullion - L.M.I., approved on 08/19/09 and expiring on 12/27/12.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 12-0402.10
Expiration Date: December 27, 2017
Approval Date: July 12, 2012



ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	—	AS REQD.	FRAME HEAD/JAMB (OPER./FIX. DOOR, SIDELITE UNIT, TRANSOM UNIT)	WOOD	MAHOGANY
2	—	AS REQD.	FRAME SILL (TRANSOM UNIT)	WOOD	MAHOGANY
3	—	AS REQD.	FRAME JAMB (TRANSOM UNIT)	WOOD	MAHOGANY
4	—	AS REQD.	3" HORIZ. MULLION COVER	WOOD	MAHOGANY
4A	—	AS REQD.	4" HORIZ. MULLION COVER	WOOD	MAHOGANY
4B	—	AS REQD.	5" HORIZ. MULLION COVER	WOOD	MAHOGANY
5	—	AS REQD.	3" VERTICAL MULLION COVER	WOOD	MAHOGANY
5A	—	AS REQD.	4" VERTICAL MULLION COVER	WOOD	MAHOGANY
5B	—	AS REQD.	5" VERTICAL MULLION COVER	WOOD	MAHOGANY
6	—	AS REQD.	3" MULLION	STEEL	—
6A	—	AS REQD.	4" MULLION	STEEL	—
6B	—	AS REQD.	5" MULLION	STEEL	—
7	—	AS REQD.	SPLINE	WOOD	—

TYPICAL WOOD—HONDURES MAHOGANY LUMBER
SPECIFIC GRAVITY = 0.45 MIN.
GRADE = 2 MIN.
MOISTURE CONTENT = 19% MAX.

CLIPPED/UNCLIPPED WOOD & STEEL MULLION SYSTEM
WINDOW/DOOR FRAME MEMBERS INCLUDED IN PROPERTIES

DESIGN LOAD RATING FOR THIS MULLION TO BE AS PER CHARTS
SHOWN ON SHEETS 2 THRU 4.

APPROVAL APPLIES TO MULLIONS COMBINATIONS WITH FRAME MEMBERS OF
WINDOWS AND DOORS IN ANY COMBINATIONS.

SEE HARTMAN WINDOWS SEPARATE NOA FOR WINDOW/DOOR ANCHORS AND
DESIGN LOAD CAPACITY.

LOWEST VALUE RESULTING FROM MULLION, WINDOW OR DOOR APPROVAL
WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

ALL GLAZING PRODUCTS USED WITH THESE MULLIONS MUST MEET THE APPLICABLE BUILDING CODE REQUIREMENTS I.E: WIND LOAD, WATER INFILTRATION, FORCED ENTRY RESISTANCE, SAFEGUARDS ETC.

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL COVERING (STUCCO, TILE ETC.).

ANCHORING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS
ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BLDG. CODE SECTION 2003.8.4.

THE APPROVED PRODUCTS NOTED HEREIN ARE EXEMPT FROM PRESERVATIVE TREATMENT PER 2326.2.1 OF THE FLORIDA BUILDING CODE WHICH EXEMPTS WOOD SPECIES LISTED AS 'DURABLE'. THE SPECIFIC PRODUCTS HEREIN ARE EXEMPTED HONDURAN MAHOGANY-SWietenia macrophylla OR EQUIVALENT SPECIES BASED ON USDA LISTING AND MUST HAVE A SPECIFIC GRAVITY EQUAL TO OR HIGHER THAN THE REFERENCED SPECIES.

MULLION SYSTEM IS RATED FOR LARGE MISSILE IMPACT,
AND CAN BE USED WITH ALL MIAMI-DADE COUNTY APPROVED
IMPACT AND NON-IMPACT RESISTANT PRODUCTS.

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0402.10
Expiration Date DEC. 27, 2017
By Mmanuel Perez
Miami Dade Product Control

MAR 23 2012

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

CLIPPED/UNCLIPPED WOOD & STEEL MULLION
HARTMAN WINDOWS & DOORS, LLC
531 SOUTHERN BLVD.
WEST PALM BEACH, FL 33405
TEL. (561) 296-9600 FAX. (561) 296-9601

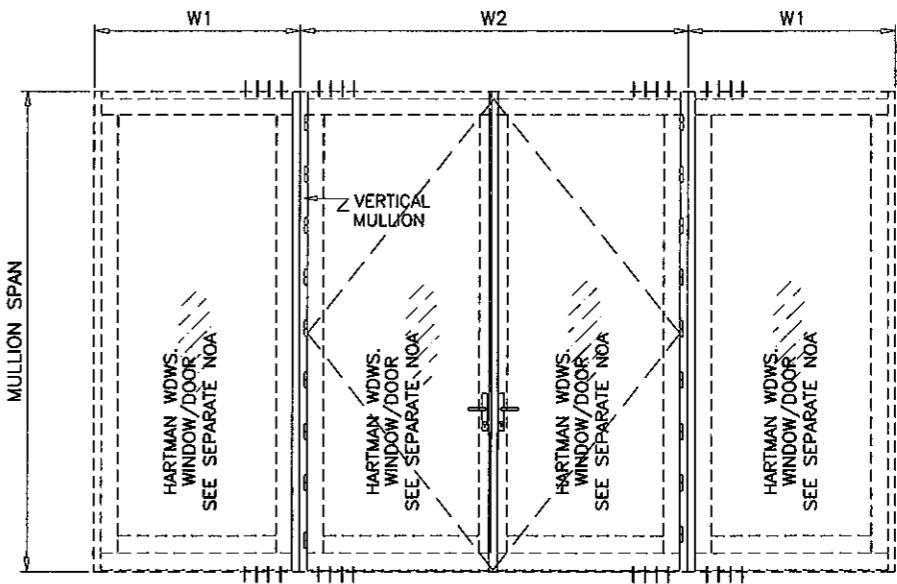
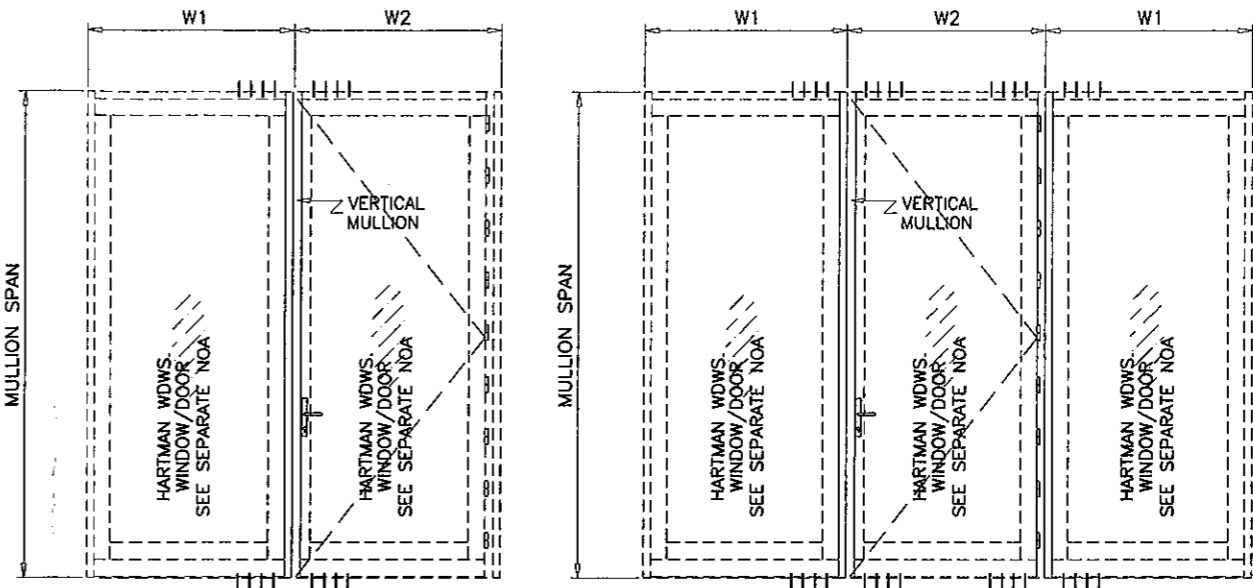
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	A	10.26.07			REV. PER SCCO COMMENTS
	B	04.17.09			UPDATED FOR 2007 FBC
	C	02.20.12			UPDATED TO 2010 FBC

date: 05-08-07
scale: 3/8" = 1"
dr. by: HAMID
chk. by:

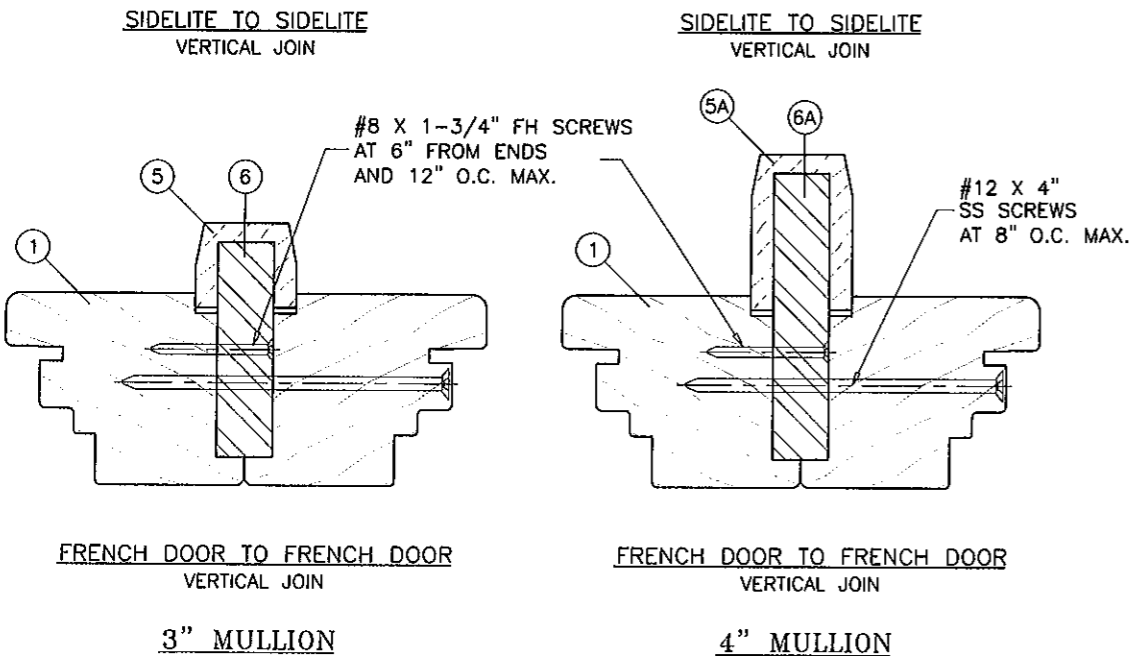
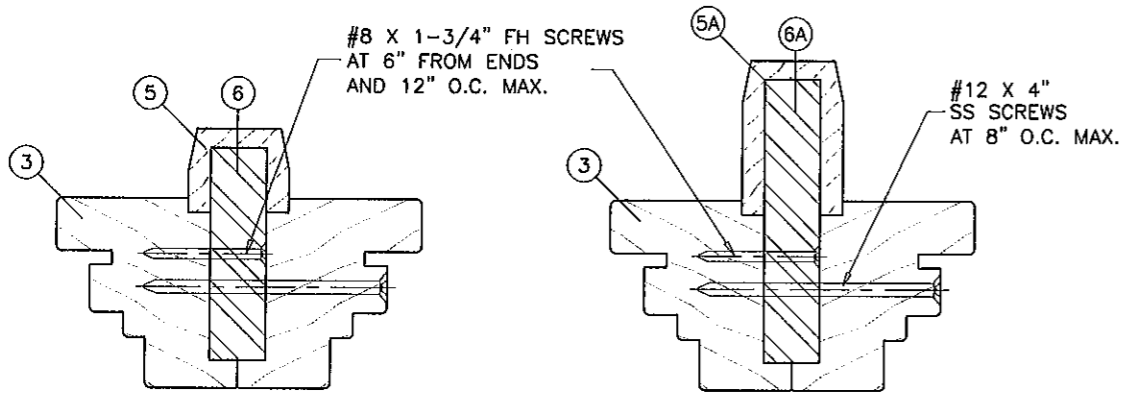
drawing no.
M07-01

sheet 1 of 7

DESIGN LOAD CAPACITY - PSF									
WINDOW DIMS.		SIDELITE TO SIDELITE SIDELITE TO FRENCH DOOR				FRENCH DOOR TO FRENCH DOOR			
		3" MULLION		4" MULLION		3" MULLION		4" MULLION	
WIDTH (W)	MULL SPAN	ANCHORS TYPE 'A'	ANCHORS TYPE 'B'	ANCHORS TYPE 'A'	ANCHORS TYPE 'B'	ANCHORS TYPE 'A'	ANCHORS TYPE 'B'	ANCHORS TYPE 'A'	ANCHORS TYPE 'B'
24"	96"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
30"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
24"	108"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
30"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48"		68.6	70.0	68.6	70.0	68.6	70.0	68.6	70.0
24"	120"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
30"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36"		65.7	65.7	70.0	70.0	70.0	70.0	70.0	70.0
42"		57.0	57.0	66.5	70.0	62.4	62.4	66.5	70.0
48"		50.7	50.7	60.0	70.0	55.5	55.5	60.0	70.0



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



SEE SHEET 5 FOR ANCHORS TYPE 'A'.
SEE SHEET 6 FOR ANCHORS TYPE 'B'.

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

PRODUCT REVISED
as complying with the **Florida**
Building Code
Acceptance No. **12-0402-10**
Expiration Date **DEC. 27, 2017**

By
(Manuel Perez) Date Product Control

MAR 23 2012

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\M07-01HWD

CLIPPED/UNCLIPPED WOOD & STEEL MULLION
HARTMAN WINDOWS & DOORS, LLC
531 SOUTHERN BLVD.
WEST PALM BEACH, FL 33405
TEL. (561) 296-9600 FAX. (561) 296-9601

revisions:

no.	date	by	description
A	10.26.07	REV. PER BCCO COMMENTS	
B	04.17.09	UPDATED FOR 2007 FBC	
C	02.20.12	NO CHANGE THIS SHEET	

date: 05-08-07

scale: 3/8" = 1"

dr. by: HAMID

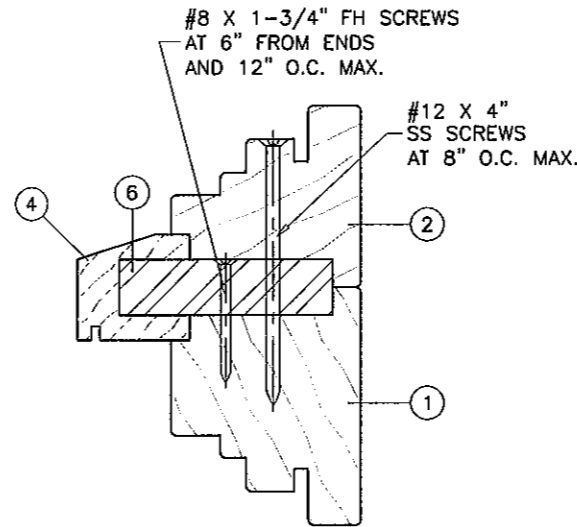
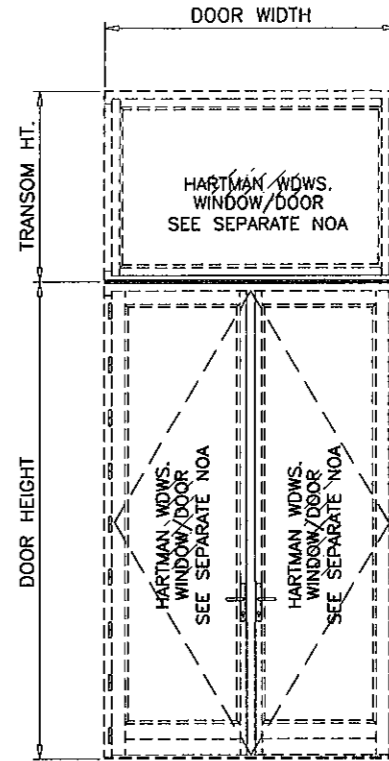
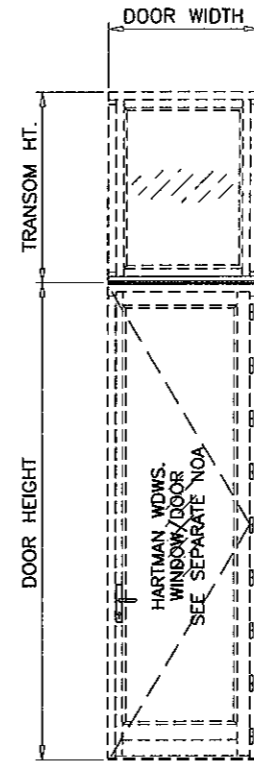
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drawing no.
M07-01

sheet 2 of 7

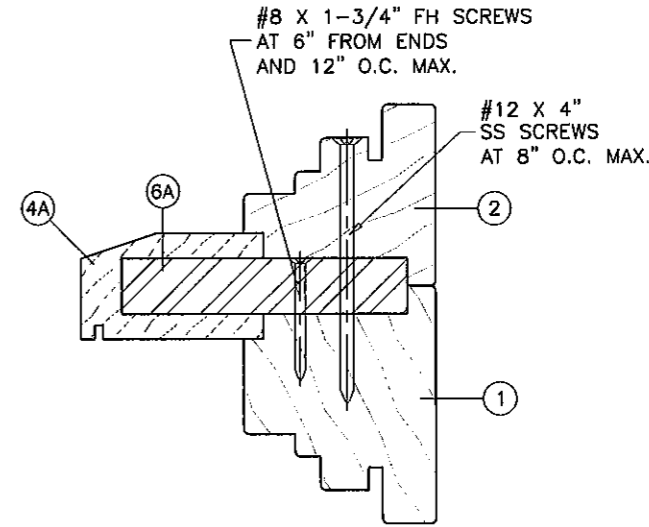
DESIGN LOAD CAPACITY				
NOMINAL DIMS.			ANCHOR TYPE 'A'	
OPNG. WIDTH INCHES	DOOR HEIGHT INCHES	TRANSOM HEIGHT INCHES	3" MULLION	4" MULLION
72		12	70.0	70.0
		18	70.0	70.0
		24	70.0	70.0
		30	70.0	70.0
		36	70.0	70.0
		42	70.0	70.0
		48	70.0	70.0
84	84	12	70.0	70.0
		18	70.0	70.0
		24	70.0	70.0
		30	70.0	70.0
		36	70.0	70.0
		42	70.0	70.0
		48	70.0	70.0
96		12	70.0	70.0
		18	70.0	70.0
		24	70.0	70.0
		30	66.8	70.0
		36	63.8	70.0
		42	61.2	70.0
		48	58.9	70.0
72		12	70.0	70.0
		18	70.0	70.0
		24	70.0	70.0
		30	70.0	70.0
		36	70.0	70.0
		42	70.0	70.0
		48	70.0	70.0
84	96	12	70.0	70.0
		18	70.0	70.0
		24	70.0	70.0
		30	70.0	70.0
		36	70.0	70.0
		42	70.0	70.0
		48	70.0	70.0
96		12	69.9	70.0
		18	66.3	70.0
		24	63.2	70.0
		30	60.4	70.0
		36	57.9	70.0
		42	55.8	70.0
		48	53.9	68.6

DESIGN LOAD CAPACITY				
NOMINAL DIMS.			ANCHOR TYPE 'A'	
OPNG. WIDTH INCHES	DOOR HEIGHT INCHES	TRANSOM HEIGHT INCHES	3" MULLION	4" MULLION
72		12	70.0	70.0
		18	70.0	70.0
		24	70.0	70.0
		30	70.0	70.0
		36	70.0	70.0
		42	70.0	70.0
		48	70.0	70.0
84	108	12	70.0	70.0
		18	70.0	70.0
		24	70.0	70.0
		30	70.0	70.0
		36	69.5	70.0
		42	67.3	70.0
		48	65.3	70.0
96		12	62.9	70.0
		18	60.0	70.0
		24	57.4	70.0
		30	55.1	70.0
		36	53.0	69.2
		42	51.2	66.3
		48	49.6	64.0
72		12	70.0	70.0
		18	70.0	70.0
		24	70.0	70.0
		30	70.0	70.0
		36	70.0	70.0
		42	70.0	70.0
		48	70.0	70.0
84	120	12	70.0	70.0
		18	70.0	70.0
		24	68.8	70.0
		30	66.3	70.0
		36	64.1	70.0
		42	62.2	70.0
		48	60.5	69.8
96		12	57.2	70.0
		18	54.8	70.0
		24	52.6	70.0
		30	50.6	67.5
		36	48.9	64.5
		42	47.4	62.1
		48	46.0	60.0



TRANSOM TO SIDELITE
HORIZONTAL JOIN

3" MULLION



TRANSOM TO FRENCH DOOR
HORIZONTAL JOIN

4" MULLION

SEE SHEET 5 FOR ANCHORS TYPE 'A'.

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

PRODUCT REVISED
as complying with the Florida
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Acceptance No 12-0402.10
Expiration Date DEC 21, 2017
By *Mamuel Pera*
Miami Dade Product Control

MAR 23 2012

af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\M07-01HWD

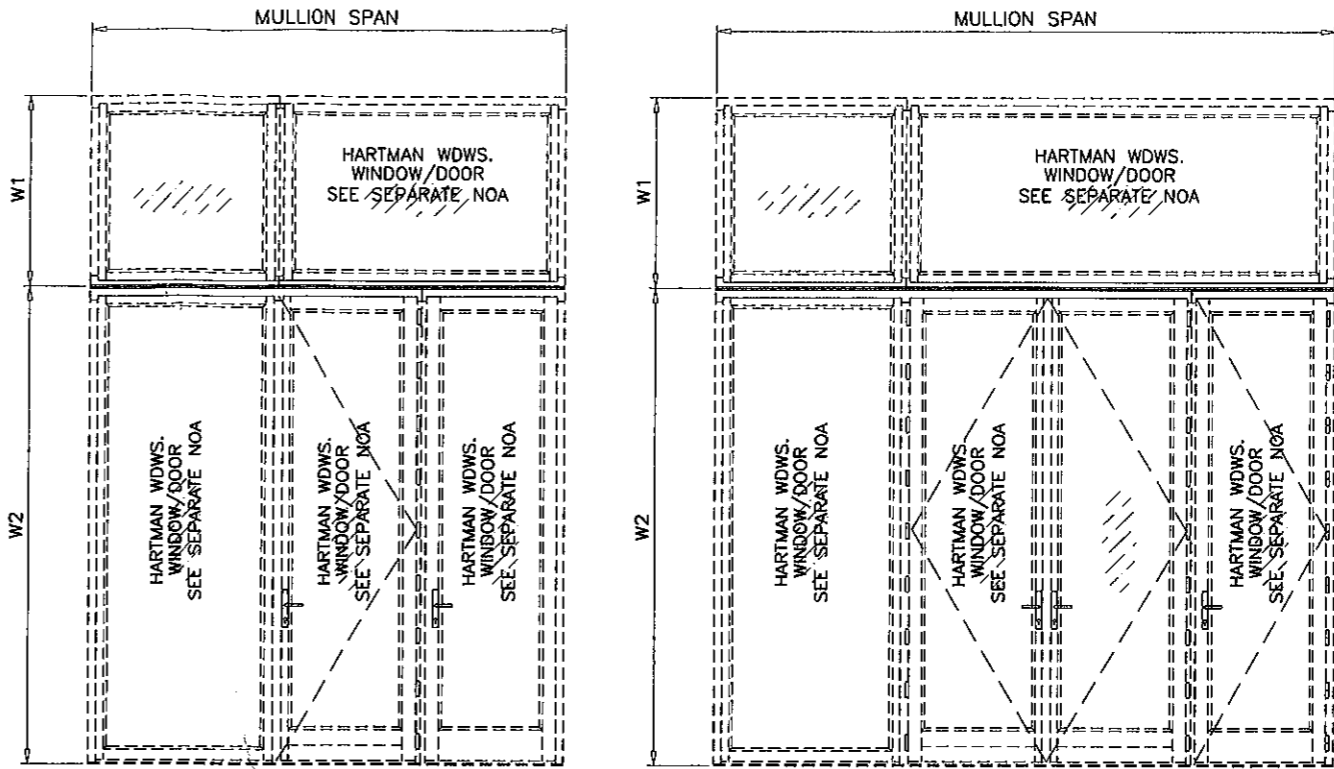
CLIPPED/UNCLIPPED WOOD & STEEL MULLION
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WEST PALM BEACH, FL 33405
TEL. (561) 296-9600 FAX. (561) 296-9601

no	date	by	description
A	10.26.07	REV. PER BCCO COMMENTS	
B	04.17.09	UPDATED FOR 2007 FBC	
C	02.20.12	NO CHANGE THIS SHEET	

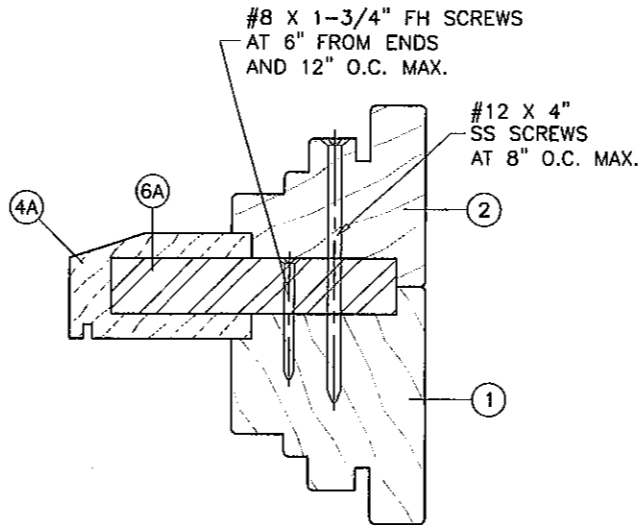
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scale: 3/8" = 1"
dr. by: HAMID
chk. by:

drawing no.
M07-01
sheet 3 of 7

DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		ANCHOR TYPE 'C'	
WIDTH (W)	MULL SPAN	3/4" X 4" STEEL BAR	3/4" X 5" STEEL BAR
48"	96"	70.0	70.0
54"		70.0	70.0
60"		70.0	70.0
66"		70.0	70.0
72"		70.0	70.0
78"		69.2	70.0
84"		64.3	70.0
48"	108"	70.0	70.0
54"		70.0	70.0
60"		70.0	70.0
66"		64.6	70.0
72"		59.3	70.0
78"		54.7	70.0
84"		50.8	65.7
48"	120"	70.0	70.0
54"		64.0	70.0
60"		57.6	70.0
66"		52.4	70.0
72"		48.0	69.0
78"		44.3	63.7
84"		41.1	59.1
48"	132"	59.5	70.0
54"		52.9	70.0
60"		47.6	70.0
66"		43.3	67.6
72"		39.7	62.0
78"		36.6	57.2
84"		34.0	53.1
48"	144"	49.7	70.0
54"		44.2	69.4
60"		39.8	62.5
66"		36.2	56.8
72"		33.2	52.1
78"		30.6	48.1
84"		-	44.6
48"	156"	39.1	66.6
54"		34.8	59.2
60"		31.3	53.3
66"		-	48.4
72"		-	44.4
78"		-	41.0
84"		-	38.0

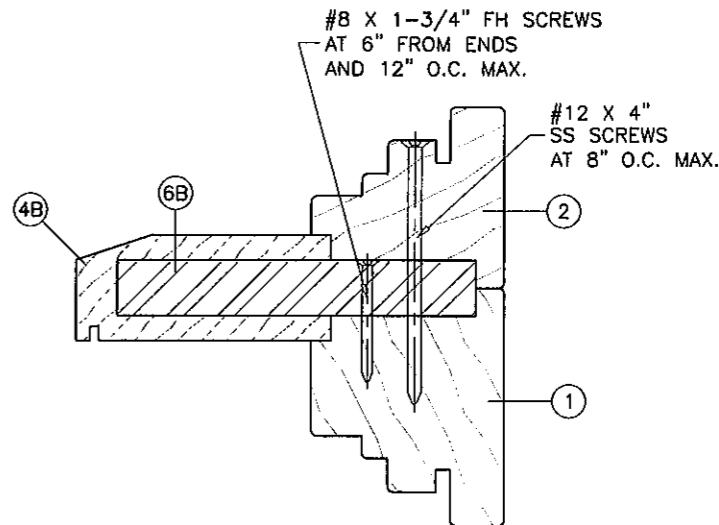


$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



TRANSOM TO SIDELITE
HORIZONTAL JOIN

4" MULLION



TRANSOM TO FRENCH DOOR
HORIZONTAL JOIN

5" MULLION

SEE SHEET 7 FOR ANCHORS TYPE 'C'.

Engr: JAVAD AHMAD
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Expiration Date DEC 27, 2017
By *Mamuel Perez*
Miami/Dade Product Control

MAR 23 2012

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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
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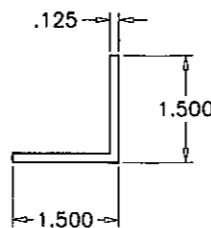
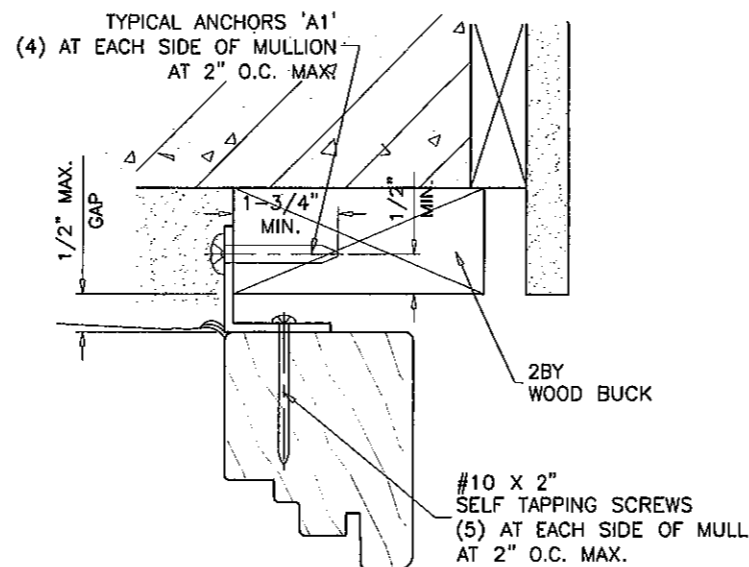
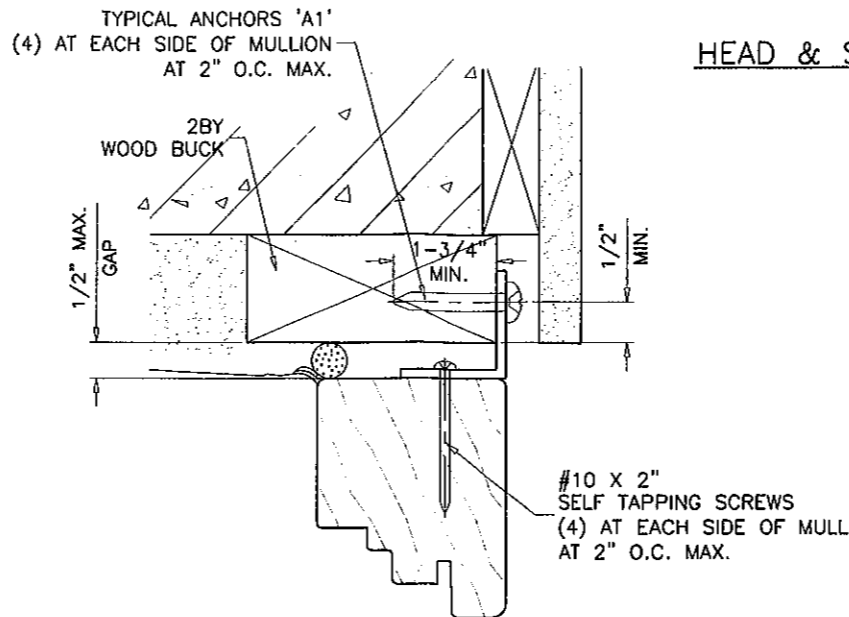
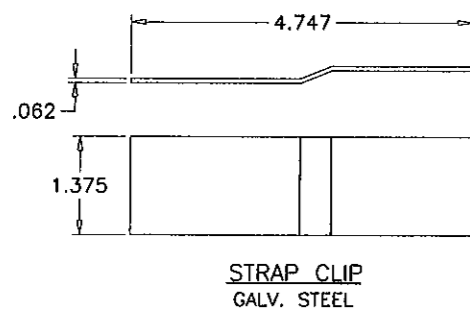
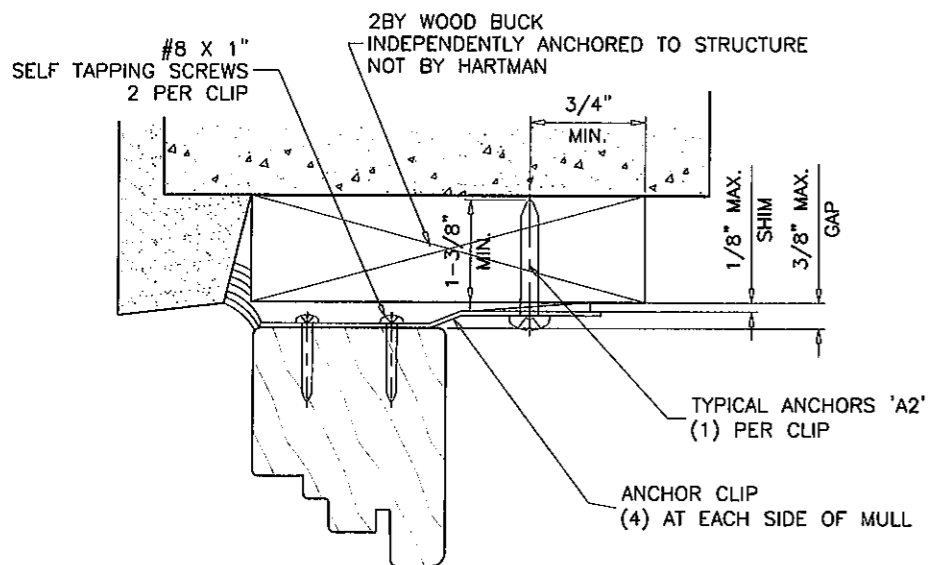
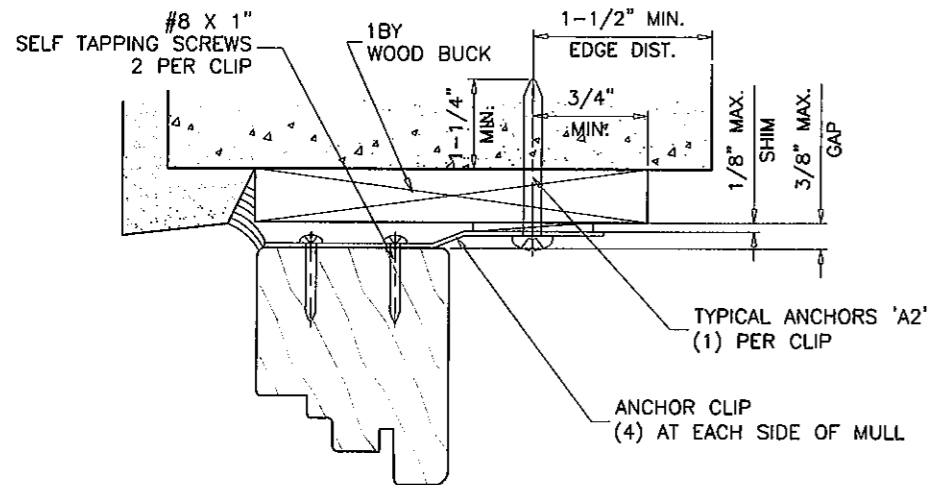
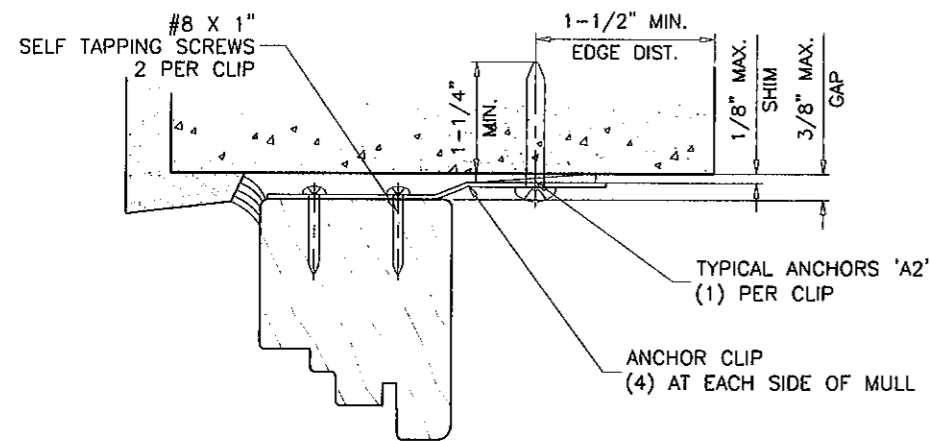
CLIPPED/UNCLIPPED WOOD & STEEL MULLION
HARTMAN WINDOWS & DOORS, LLC
531 SOUTHERN BLVD.
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A	10.26.07	REV. PER BCCO COMMENTS	
B	04.17.09	UPDATED FOR 2007 FBC	
C	02.20.12	CHART REVISED	

date: 05-08-07
scale: 3/8" = 1"
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chk. by:

drawing no.
M07-01

sheet 4 of 7



ALUMINUM ANGLE CONT.
(6063-T5)

HEAD & SILL ANCHORS FOR MULLED WINDOWS & DOORS WITH MULLION CLIP

ANCHORS TYPE 'A'

ANCHORS THRU STRAP CLIPS & ALUM ANGLE

TYPE 'A1' - #10 SMS
INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-1/2" MIN. PENETRATION INTO WOOD

TYPE 'A2' - 3/16" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-3/8" MIN. PENETRATION INTO WOOD

THRU WOOD BUCKS INTO MASONRY OR DIRECTLY INTO MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

ANCHOR EDGE DISTANCES

INTO CONCRETE AND MASONRY = 1-1/2" MIN. (UNLESS SPECIFIED)
INTO WOOD STRUCTURE = 3/4" MIN. (UNLESS SPECIFIED)

ANCHORS CL TO CL DISTANCE

INTO CONCRETE AND MASONRY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 3/4" MIN. (UNLESS SPECIFIED)

CONCRETE f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK f'm = 2000 PSI MIN.

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

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Expiration Date DEC. 21, 2017
By *Mamun Peraz*
Miami Dade Product Control

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COMP-ANL\M07-01HWD

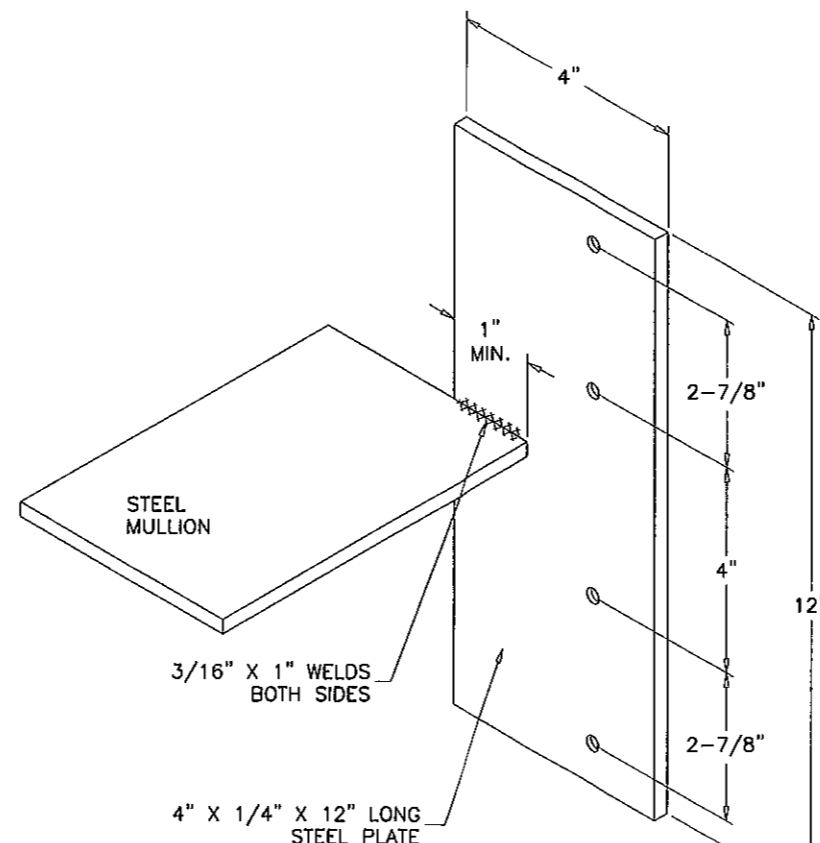
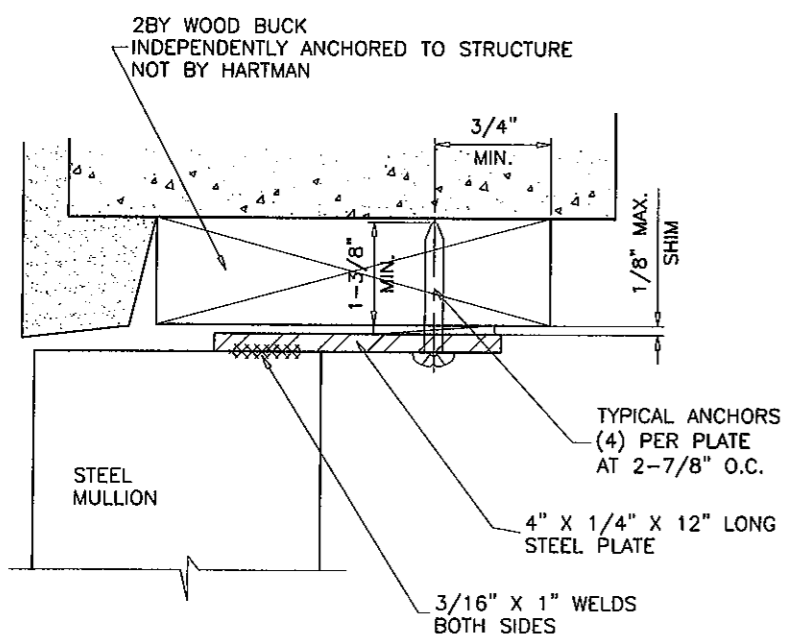
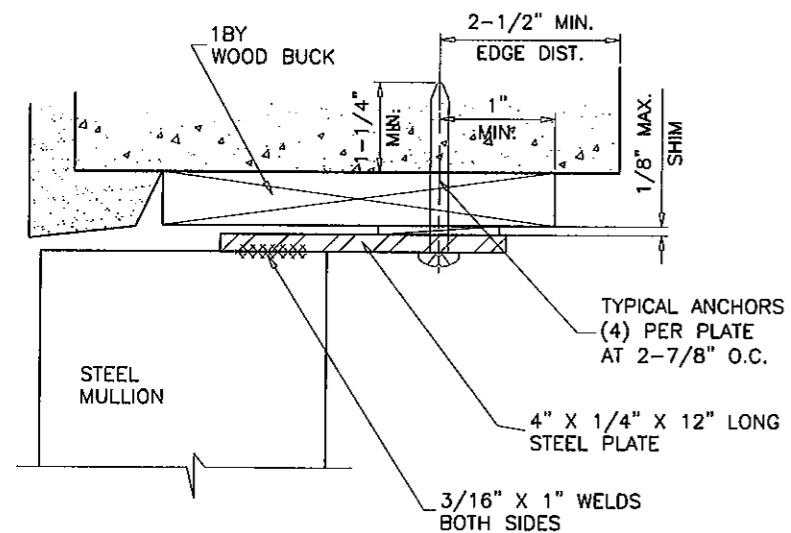
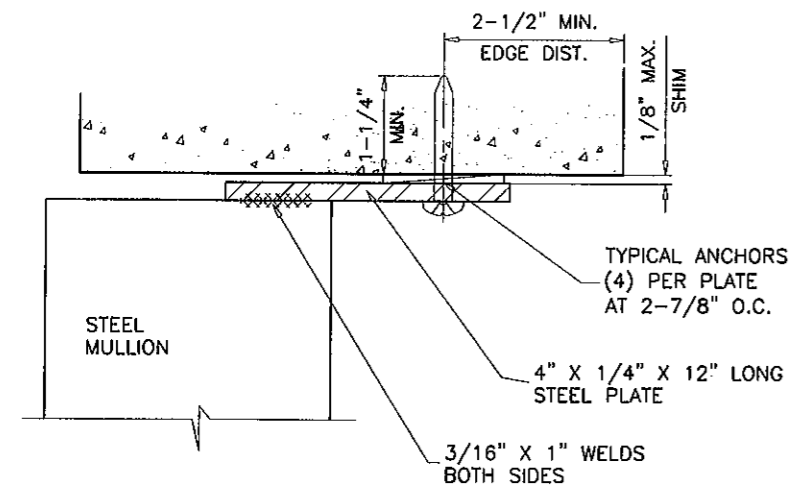
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C	02.20.12	ANCHORS REV.	

date: 05-08-07
scale: 3/8" = 1"
dr. by: HAMID
chk. by:

drawing no.
M07-01

sheet 5 of 7



STEEL PLATE MAY PROJECT TO OUTSIDE OR INSIDE OF DOOR FRAME.

HEAD & SILL ANCHORS FOR MULLED WINDOWS & DOORS WITH STEEL PLATE

ANCHORS TYPE 'B'

ANCHORS THRU STEEL PLATE

1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-3/8" MIN. PENETRATION INTO WOOD

THRU WOOD BUCKS INTO MASONRY OR DIRECTLY INTO MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

ANCHOR EDGE DISTANCES

INTO CONCRETE AND MASONRY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.

ANCHORS CL TO CL DISTANCE

INTO CONCRETE AND MASONRY = 2-7/8" MIN.
INTO WOOD STRUCTURE = 1" MIN.

CONCRETE f'c = 3000 PSI MIN.

C-90 HOLLOW/FILLED BLOCK f'm = 2000 PSI MIN.

ALL OTHER ANCHORS NOT DESCRIBED HEREIN TO BE AS PER DOOR OR FIXED LITE NOA'S.

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

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By *Manuel Perez*
Miami Dade Product Control

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date:	05-08-07
scale:	3/8" = 1"
dr. by:	HAMID
chk. by:	

drawing no.

M07-01

sheet 6 of 7

HEAD & SILL ANCHORS FOR MULLED WINDOWS & DOORS WITH STEEL PLATE

ANCHORS TYPE 'C'

ANCHORS THRU STEEL PLATE

1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-3/8" MIN. PENETRATION INTO WOOD

THRU WOOD BUCKS INTO MASONRY OR DIRECTLY INTO MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

ANCHOR EDGE DISTANCES

INTO CONCRETE AND MASONRY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.

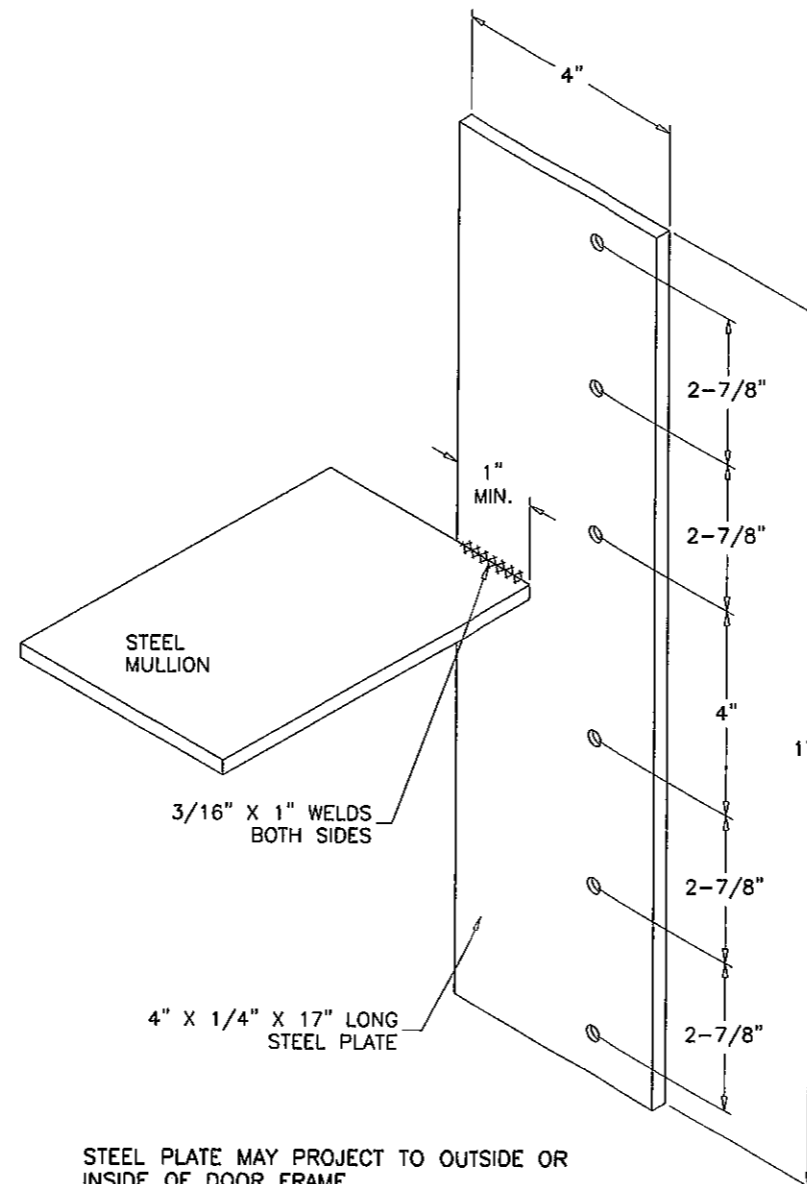
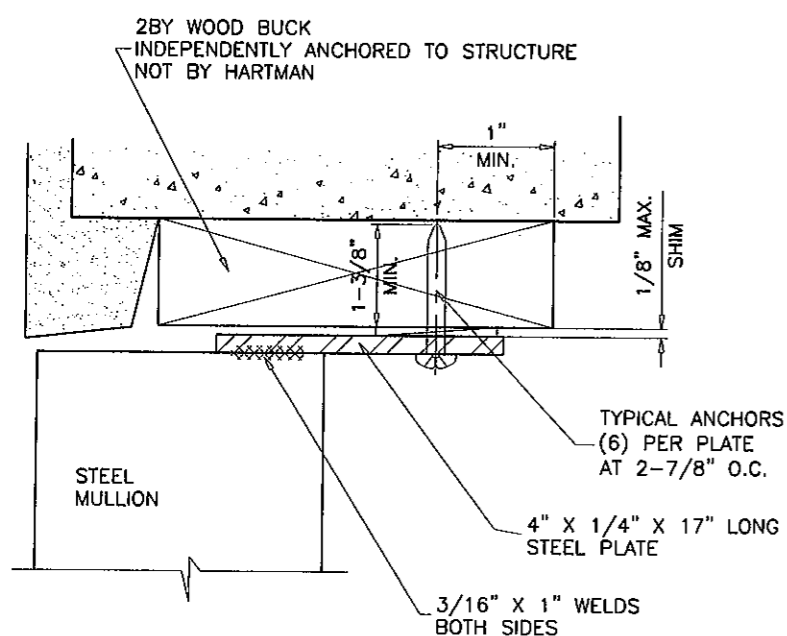
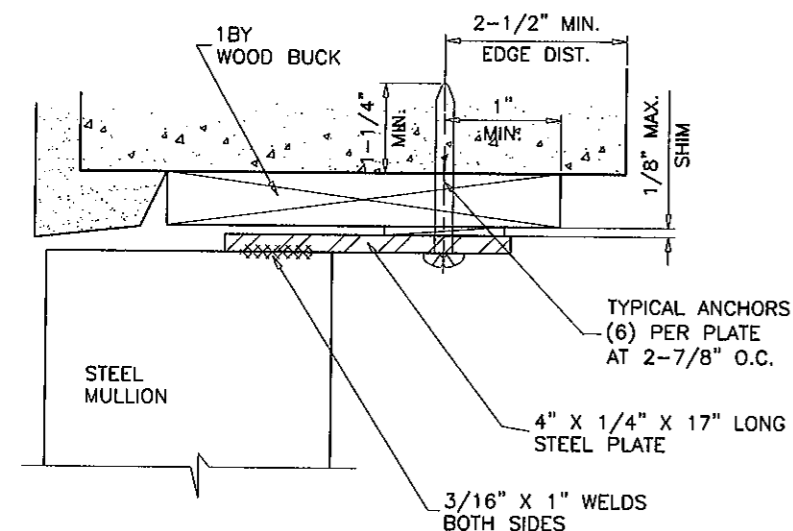
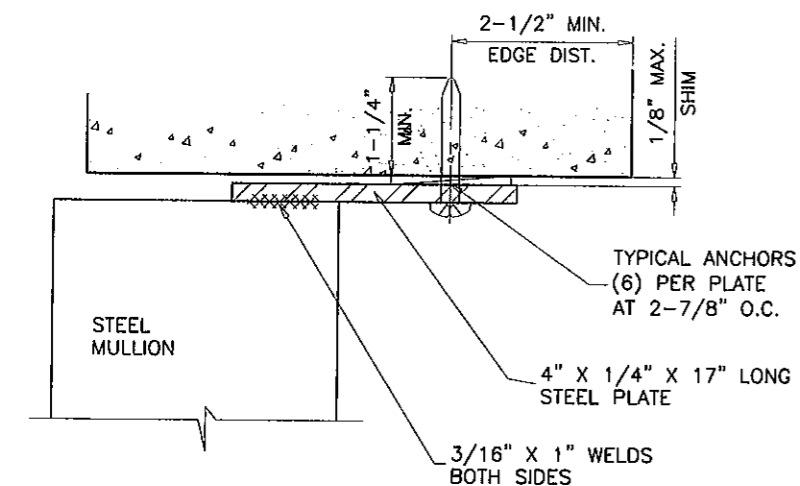
ANCHORS CL TO CL DISTANCE

INTO CONCRETE AND MASONRY = 2-7/8" MIN.
INTO WOOD STRUCTURE = 1" MIN.

CONCRETE f'c = 3000 PSI MIN.

C-90 HOLLOW/FILLED BLOCK f'm = 2000 PSI MIN.

ALL OTHER ANCHORS NOT DESCRIBED HEREIN TO BE
AS PER DOOR OR FIXED LITE NOA'S.



STEEL PLATE MAY PROJECT TO OUTSIDE OR
INSIDE OF DOOR FRAME.

Engr. JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

[Signature]

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By *[Signature]*
Miami Dade Product Control

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	C	02.20.12	ANCHORS	REV.

date:	05-08-07
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dr. by:	HAMID
chk. by:	

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sheet 7 of 7